

**REMARKS**

This Application has been carefully reviewed in light of the Final Office Action mailed October 3, 2005 ("Office Action"). At the time of the Office Action, Claims 1-20 were pending in the application. In the Office Action, the Examiner rejects Claims 1-20. Applicants amend Claims 3, 13, and 15 to correct certain typographical errors. Applicant respectfully requests reconsideration and allowance of Claims 1-20.

**Final Office Action is Unjustified**

In the Office Action on page 9, the Examiner states that "Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a)." However, in the previous response dated July 6, 2005 no amendments were made to the independent claims 1 or 16. Therefore, the Examiner's reliance on MPEP § 706.07(a) is misplaced. Indeed, MPEP § 706.07(a) prohibits making the current office action final. In particular, it states: "Under present practice, second or any subsequent actions on the merits shall be final, **except where** the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p)." (Emphasis added). Here, Applicant did not make any amendments or submit an IDS that necessitated a new ground of rejection. Accordingly, Applicant respectfully requests the Examiner to withdraw the finality of the current Office Action.

**Section 103 Rejections**

The Examiner rejects Claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,097,521 issued to Althaus, et al. ("*Althaus*") in view of U.S. Patent No. 4,293,826 issued to Scifres, et al. ("*Scifres*"). Applicant respectfully requests reconsideration and allowance of Claims 1-20.

With respect to Claim 1, the Examiner acknowledges that *Althaus* "does not specifically disclose the substrate having at least one surface area which extends obliquely with regard to the upper surface, and wherein the obliquely extending surface area deflects." (Office Action, page 2). The Examiner then combines *Althaus* with *Scifres* and relies on

surface area (111) of *Scifres* which, according to the Examiner, “extends obliquely with regard to the upper surface of the substrate (12)”. (Office Action, page 2). Applicant respectfully traverses the *Althaus-Scifres* combination for at least two reasons. First, the teachings of *Scifres* render *Althaus* unsatisfactory for its intended purpose. Second, the *Scifres* reference actually teaches away from Claim 1.

At the outset, Applicant respectfully submits that the Examiner withdraw the *Althaus-Scifres* combination as improper. Applicant submits that there is no basis in the prior art to combine *Althaus* and *Scifres*. To combine prior art in order to defeat an application under 35 U.S.C. § 103, “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” (Manual of Patent Examining Procedure (MPEP) §2143). If a “proposed modification would render the prior invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” MPEP §2143.01. Applicant respectfully submits, as detailed below, that the modification of *Althaus* by the teachings of *Scifres*, as suggested by the Examiner, would render *Althaus* “unsatisfactory for its intended purpose.”

Figure 1 of *Althaus* illustrates a “side surface 44 of monitor diode 21 opposite the monitor diode beam input surface 23” which “is beveled so that it reflects at least a part of the radiation penetrating the monitor diode 21 to a pn-junction 45 of monitor diode 21 that detects radiation.” (Col. 7, ll. 20-24). In contrast, *Scifres* discloses a “p-type impurity” that “is diffused into the substrate surface forming the p-n junction 113 forming detector 114.” (Col. 7, ll. 28-31). “The small portion of the light reaching areas of surface 111 adjacent to surface 115 is refracted into detector 114 ...” (Col. 7, ll. 38-40). Therefore, in *Scifres*, the monitoring element (e.g., detector 114) is embedded within the substrate and the radiation is absorbed in order to perform detection, while in *Althaus* the monitoring element (e.g., monitor diode 21) is separate from the substrate and requires reflection of the radiation in order to perform detection. If *Scifres* was combined with *Althaus*, then the radiation would be absorbed, not reflected, in order to perform detection and the *Althaus* “monitor diode 21” would no longer work as intended. Therefore, the teachings of *Scifres* render *Althaus* “unsatisfactory for its intended purpose.” As such, the *Althaus-Scifres* combination is improper.

Second, even if the *Althaus-Scifres* combination is proper, *Scifres* actually teaches away from Claim 1. “A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). (M.P.E.P. § 2141.02). Claim 1 recites, in part, “wherein the obliquely extending surface area **deflects onto** the monitor component the part of the radiation emitted by the transmission component which is to be detected by the monitor component.” (Emphasis added). In *Scifres*, the “angled surface 111” is “etched into the substrate 12 to receive light emitted from facet 26.” (Col. 7, ll. 23-24). Moreover, the “p-type impurity is **diffused into the substrate** surface forming the p-n junction 113 forming detector 114.” (Col. 7, ll. 28-31; emphasis added). “The small portion of the light reaching areas of surface 111 adjacent to surface 115 **is refracted into detector 114 ...**” (Col. 7, ll. 38-40; emphasis added). Therefore, in *Scifres*, the monitoring element (e.g., detector 114) is embedded within the substrate and the **radiation is absorbed** in order to perform detection, which teaches away from “wherein the obliquely extending surface area **deflects onto** the monitor component the part of the radiation emitted by the transmission component which is to be detected by the monitor component” as recited, in part, in Claim 1. Therefore, not only does the *Althaus-Scifres* combination fail to teach, suggest, or disclose an element of Claim 1, but it actually teaches away from an element of Claim 1.

For at least the reasons stated above, Applicant respectfully requests reconsideration and allowance of Claim 1.

Claims 2-15 depend from Claim 1, shown above to be allowable, and recite further elements that are patentably distinguishable from the *Althaus-Scifres* combination. For example, Claim 7 recites, “wherein the upper surface defines a first plane, and the carrier substrate includes a second surface defining a second plane that is parallel to the first plane, the first and second planes having different heights and being connected by the obliquely extending surface area, the transmission component being arranged on the upper surface and the monitor component being arranged on the second surface.” The Examiner’s reliance on *Althaus* to reject the arrangement of surfaces recited in Claim 7 is misplaced. For example, if surface 49 defines a “first plane” and surface 32 defines a “second plane,” as suggested by the Examiner, then element 31 of *Althaus*, which is a “recess” as opposed to a “surface,” clearly **does not** comprise an “obliquely extending surface area” that connects the “first and

second planes” as suggested by the Examiner. Moreover, the transmission component 2 of *Althaus* is not arranged on surface 49, as suggested by the Examiner. Rather, it is arranged on surface 30. Similarly, the monitor diode 21 is not arranged on the second surface 32, as suggested by the Examiner. Rather, it is arranged on surface 49.

Claim 8 recites, in part, “wherein the carrier substrate comprises a second obliquely extending surface area which is oriented to deflect the part of the radiation reflected from the first obliquely extending surface area onto the monitor component.” To reject this element, the Examiner argues that “[i]t would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the oblique surface of the monitor component, since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art (In re Karlsen, 136 USPQ 184).” (Office Action, page 4). Applicant respectfully traverses the Examiner’s rejection. First, the “oblique surface of the monitor component” is not a “second obliquely extending surface area” of the “carrier substrate” as recited in Claim 8. Indeed, the *Althaus-Scifres* combination completely fails to teach, suggest, or disclose “wherein the carrier substrate comprises a second obliquely extending surface area.” Next, the Examiner’s reliance on In re Karlsen is misplaced because Claim 8 does not seek to “omit” an element and its function. On the contrary, claim 8 provides for a “second obliquely extending surface” which adds an element to the claimed structure.

Claim 10 recites, in part, “wherein the two obliquely extending surface areas of the carrier substrate represent lateral edges of a cutout formed in the upper surface of the carrier substrate.” To reject Claim 10, the Examiner first acknowledges that *Althaus* “does not specifically discloses oblique surfaces” but then somehow concludes without any basis that “However therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to fabricate the cutout to contain oblique surfaces for the purpose of reflecting light.” (Office Action, page 5). Applicant respectfully traverses the Examiner’s conclusory rejection and requests that the Examiner cite a reference for this teaching or appropriately take official notice of this teaching. Without more, the Examiner’s rejection is purely conclusory and cannot stand as a proper rejection.

Applicant also traverses the Examiner’s rejections of the other claims depending from Claim 1 but do not include specific arguments herein in order to avoid burdening the record. Applicant reserves the right to argue the patentable distinctions of these other dependent

claims in a later response if necessary. For at least the reasons stated above, Applicant respectfully requests reconsideration and allowance of Claims 2-15.

Claim 16 recites, in part, “An apparatus comprising ... a substrate including a first surface defining a first plane and a second surface defining a second plane that extends obliquely relative to the first plane ... a transmission component mounted on the first surface for emitting radiation such that a portion of the emitted radiation is reflected by the second surface ... and a monitor component mounted on the substrate and positioned to receive the reflected portion of the emitted radiation.” For at least the reasons stated above with regard to Claim 1, Applicant respectfully requests reconsideration and allowance of Claim 16. Applicant respectfully traverses the rejections of Claims 17-20 which depend from Claim 16, shown above to be allowable. By virtue of their dependence from Claim 16 and because Claims 17-20 recite further elements that are patentably distinguishable from the *Althaus-Scifres* combination, Applicant respectfully requests reconsideration and allowance of Claims 17-20.

**CONCLUSION**

For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Samir A. Bhavsar, Attorney for Applicant, at the Examiner's convenience at (214) 953-6581.

Although no fees are believed due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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